



**BOX PATENT**

Attorney Docket No. 23800

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Application of

MARAIS

Examiner: M. Bumgarner

Serial No.: 09/582,700

Art Unit: 3732

Filing Date: August 21, 2000

For: **IRRIGATING MEDIUM FOR ROOT CANALS**

**Appendix B**

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Please amend the following claims as indicated in the following clean copy of the claims.

a1  
1. (Once Amended) A method for treating root canals, comprising applying an irrigating medium to a root canal, wherein the irrigating medium comprises an aqueous solution being characterized in that it is electro-chemically activated and has a pH of between 6.75 and 8.5 with microcidal as well as dispersing and surfactant properties.

gpc  
2. (Once Amended) The method of claim 1, wherein the electro-chemically activated aqueous solution includes both an aqueous anion-containing and an aqueous cation-containing solution.

3. (Once Amended) The method of claim 2, wherein the aqueous anion-containing solution and the aqueous cation-

containing solution are prepared by means of electrolysis of an aqueous solution of a salt.

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a1  
4. (Twice Amended) The method of claim 2 wherein the anion-containing and the cation-containing solution are produced by an electro-chemical reactor comprising a through-flow, electro-chemical cell having two co-axial electrodes with a co-axial diaphragm between them so as to separate an annular inter-electrode space into cathodic and anodic chambers.

5. (Twice Amended) The method of claim 2 wherein the anion-containing solution is produced from a 10% aqueous NaCl solution, electrolysed to produce activated or excited radical cation and radical anion species, the anion-containing solution having an extremely high redox potential of up to about +1170 mV.

6. (Once Amended) The method of claim 5 wherein the anion-containing solution has a pH of about 2-7 and a redox potential of about +1170 mV.

7. (Once Amended) The method of claim 5 wherein the cation-containing solution has a pH of up to about 7-13 and a redox potential of about -980 mV.

8. (Once Amended) An irrigating medium for irrigating root canals, the irrigating medium comprising an electro-chemically

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activated, aqueous saline solution having a pH of between 6.75  
and 8.5 with microcidal as well as dispersing and surfactant  
properties.

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